



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/413,348	10/06/1999	NORIHISA FUKUTOMI	Q56091	1912
7590 08/28/2008 SUGHRUE MION ZINN MACPEAK & SEAS 2100 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20037				
EXAMINER KIM, CHRISTOPHER S				
ART UNIT		PAPER NUMBER		
3752				
MAIL DATE		DELIVERY MODE		
08/28/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/413,348

Applicant(s)

FUKUTOMI ET AL.

Examiner

Christopher S. Kim

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-9 is/are pending in the application.
4a) Of the above claim(s) 2-5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 6-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

1. The Office action is in response to the remand by The Board of Patent Appeals and Interferences mailed on June 26, 2008.

Election/Restrictions

2. Claim 2 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on April 27, 2000.

The Board of Patent Appeals and Interferences states that claim 2 is not readable on the elected species of figure 1 because the elastic member 18 is attached to the core 4 via the groove 18a rather than "being attached to a portion of said sleeve located near an end portion of said coil" as required by claim 2. The Board of Patent Appeals and Interferences states that the elastic member 18 is not attached to a portion of the sleeve 17 as required by claim 2.

The exploded view in figure 1 shows sleeve 17 separated from rubber ring 18 which is in groove 19a of core 4. The specification discloses, on page 6, lines 23-26 (second full paragraph), that elastic member 18 comes into contact with sleeve 17. Therefore, it appears that, at least in the assembled state, the elastic member 18 is attached to sleeve 17 via the groove 18a of core 4. When assembled, the core 4 and elastic member 18a does not move or slice relative to sleeve 17.

Additionally, "attach" is defined as:

verb

1. cause to be attached [ant: detach]
 2. be attached; be in contact with
 3. become attached; "The spider's thread attached to the window sill"
[ant: come away]
 4. create social or emotional ties; "The grandparents want to bond with
the child" [syn: bind]
 5. take temporary possession of as a security, by legal authority; "The
FBI seized the drugs"; "The customs agents impounded the illegal
shipment"; "The police confiscated the stolen artwork" [syn: impound]
- attach. (n.d.). WordNet® 3.0. Retrieved August 27, 2008, from
Dictionary.com website: <http://dictionary.reference.com/browse/attach>.

The second definition "be in contact with" appears to be applicable to claim 2 and figure 1. The broadest reasonable interpretation of "attached" would appear to be readable on the elected species of figure 1. Nevertheless, based on The Board of Patent Appeals and Interferences, claim 2 is withdrawn from further consideration as being drawn to a non elected species.

3. Claims 3-5 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on April 27, 2000.

4. Claims 6-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Reiter (6,224,002).

Reiter discloses a fuel injection valve comprising: a needle valve 18; an armature 21; a solenoid/coil 1; an elastic member 35; a sleeve 33, 34; a core 2; a valve holder 13, 16.

5. Claims 6-9 (as best understood) are rejected under 35 U.S.C. 102(b) as being anticipated by Asano (5,188,297).

Asano discloses a fuel injection valve comprising: a needle valve 31; an armature 32; a solenoid 44; a sleeve 22; a buffer portion/means for damping 39 being an elastic member (O-ring); a fuel passage 22f; an end face (down stream side of 32); a nozzle opening 27; a core 36. O-ring 39 inherently functions as a buffer portion.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. Kim whose telephone number is (571) 272-4905. The examiner can normally be reached on Monday - Friday, 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on (571) 272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher S. Kim/
Primary Examiner, Art Unit 3752

CK